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NOTICE OF ALLOWANCE AND FEE(S) DUE

5514 7590 10/16/2008
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
KASSA, YOSEF	
ART UNIT	PAPER NUMBER

2624
DATE MAILED: 10/16/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,939	03/30/2004	Kotaro Kitajima	00862.018058.	2924

TITLE OF INVENTION: IMAGE PROCESSING APPARATUS, METHOD, PROGRAM AND STORAGE MEDIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/16/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

5514 7590 10/16/2008

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/811,939 03/30/2004

Kotaro Kitajima

00862.018058.

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TITLE OF INVENTION: IMAGE PROCESSING APPARATUS, METHOD, PROGRAM AND STORAGE MEDIUM

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/16/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
KASSA, YOSEF	2624	382-276000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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5514	7590	10/16/2008	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			KASSA, YOSEF	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 10/16/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 841 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 841 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/811,939

Examiner

YOSEF KASSA

Applicant(s)

KITAJIMA, KOTARO

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on 06/30/2008.
2. ☒ The allowed claim(s) is/are 1-8,11,13,14 and 17-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/YOSEF KASSA/
Primary Examiner, Art Unit 2624

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary M. Jacobs on 10/10/2008.

The application has been amended as follows: Please refer to the attached amended claims 1-8, 11, 13, 14 and 17-20 on the following pages.

1. (Currently Amended) An image processing apparatus comprising:
an input unit configured to input image data including image components;
an image processor configured to process the input image data;
a generating unit configured to generate plane mesh image data representing a plane mesh image having equally spaced grid lines and transform the plane mesh image data by changing one of the space or and the tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processor~~; and
an adding unit configured to add the transformed mesh image data to the image data processed by the image processor.
2. (Previously Presented) The image processing apparatus according to claim 1, wherein the distortion occurs during capturing an image to obtain the image data.
3. (Previously Presented) The image processing apparatus according to claim 1, wherein the generating unit transforms the plane mesh image data according to attribute information included in the input image data.
4. (Previously Presented) The image processing apparatus according to claim 1, wherein the generating unit transforms the plane mesh image data according to information relating to an optical system that captures the image data.

5. (Previously Presented) The image processing apparatus according to claim 4, wherein the generating unit transforms the plane mesh image data according to information on a bulge aberration of the optical system.

6. (Previously Presented) The image processing apparatus according to claim 4, wherein the generating unit transforms the plane mesh image data according to information on a zoom magnification of the optical system.

7. (Previously Presented) The image processing apparatus according to claim 6, wherein the generating unit generates the plane mesh image data having a large mesh size when the image data has been captured on a telescopic side of the optical system and generates the plane mesh image data having a small mesh size when the image data has been captured on a wide-angle side of the optical system.

8 (Previously Presented) The image processing apparatus according to claim 4, further comprising a sensor that detects a tilt of the optical system, and wherein the generating unit transforms the plane mesh image data according to a tilt of the optical system.

9-10. (Canceled)

11. (Currently Amended) An image processing apparatus comprising:
an input unit configured to input image data comprising image components;
an image processor configured to process the input image data;

a transforming unit configured to transform an image based on the image data input by the input unit;

a generating unit configured to generate plane mesh image data representing a plane mesh image having equally spaced grid lines and transform the plane mesh image data by changing one of the space or and the tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processor which is transformed corresponding to the image transformed by the transforming unit;~~

an adding unit configured to add the transformed plane mesh image data generated by the generating unit to the image data transformed by the transforming unit; and

a recording unit configured to record onto a storage medium, the image data in which the mesh image data is added.

12. (Canceled)

13. (Previously Presented) The image processing apparatus according to claim 11, wherein the generating unit transforms the plane mesh image data according to attribute information included in the input image data.

14. (Previously Presented) The image processing apparatus according to claim 11, wherein the generating unit transforms the plane mesh image data according to information relating to an optical system that captures the image data.

15. (Canceled)

16. (Canceled)

17. (Currently Amended) An image processing method, comprising:

an input step of inputting image data including image components;

a processing step of processing the input image data;

a generating step of generating plane mesh image data representing a plane mesh image having equally spaced grid lines and transforming the plane mesh image data by changing one of the space ~~or~~ and the tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processing step~~; and

an adding step of adding the transformed mesh image data to the image data processed by a processor that performs the processing step.

18. (Currently Amended) An image processing method, comprising:

an input step of inputting image data comprising image components;

an image processing step of processing the input image data;

a transforming step of transforming an image based on the image data input by the input unit;

a generating step of generating plane mesh image data representing a plane mesh image having equally spaced grid lines and ~~transform~~ transforming the plane mesh image data by

changing one of the space or and the tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processing step or corresponding to the input image data transformed in the transforming step; and~~

a recording step of recording the input image data and the transformed plane mesh image data onto a storage medium.

19. (Currently Amended) A computer program stored on a computer-readable medium for causing a computer to execute the steps of:

inputting image data including image components;

processing the input image data;

generating plane mesh image data representing a plane mesh image having equally spaced grid lines; and

~~transforming transform~~ the generated plane mesh image data by changing one of the space and the or tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processor; and~~

adding the transformed mesh image data to the image data processed by the processing step.

20. (Currently Amended) A computer-readable storage medium storing a computer program for causing a computer to execute the steps of:

inputting image data including image components;

processing the input image data;

generating plane mesh image data representing a plane mesh image having equally spaced grid lines; and

transforming ~~transform~~ the plane mesh image data by changing one of the space and the ~~or~~ tilt angle of the grid lines, wherein the transforming of the plane mesh image data is performed according to a distortion presented in the input image data ~~or the processing performed by the image processor~~; and

adding the transformed mesh image data to the image data processed by the image processing step.

Reasons for Allowance

2. Based on applicant's amendment/persuasive arguments, see the remarks on pages 8-11, filed on 06/30/2008, the art rejection for claims 1-8, 11, 13, 14 and 17-20 has been withdrawn. Therefore, claims 1-8, 11, 13, 14 and 17-20 are allowable.
3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (7027054), (6919892), (6850651), (6677942) and (6020931).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (571) 272-7452. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and (571) 273-8300 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/10/2008.

/YOSEF KASSA/

Primary Examiner, Art Unit 2624